

DPHSWD in Pakistan



Accomplishments in Pakistan

- Provided technical support for Dengue fever outbreaks in Sindh and Punjab regions. The Dengue focal person in Sindh region is an FELTP graduate.
- Trained 2 residents from Afghanistan in the 3rd cohort of the FELTP.
- Investigated an outbreak of pneumonia in children in January 2012 that resulted in children's enrollment in a Community-based Management of Acute Malnutrition program. A measles vaccination was also carried out.
- 31 Public Sector Physicians who completed the FELTP now serve at the national or provincial health system level in Pakistan.
- Polio vaccination coverage increased to greater than 95% in 196 village areas of Pakistan as a result of the N-STOP project.

Overview and Goals

The Centers for Disease Control and Prevention (CDC), through its Division of Public Health Systems and Workforce Development (DPHSWD), has been working in Pakistan since 2006. The Pakistan Field Epidemiology and Laboratory Training Program (FELTP), established in Islamabad, works within the context of the National Strategic Framework on Disease Surveillance (2005-2015) developed by the (former) Pakistan Ministry of Health (MOH). DPHSWD's goals are to strengthen the Pakistani public health system and laboratory network, as well as improve capacity in applied epidemiology, public health surveillance, and response to disease outbreaks and other public health threats.

Program Description

Building Workforce Capacity

The FELTP is a two-year, full-time training and service program which involves 25% classroom instruction and 75% field assignments. Residents take courses in epidemiology, communications, economics, and management. In the field, they conduct epidemiologic investigations and field surveys, evaluate surveillance systems, perform disease control and prevention measures, report their findings to decision-makers and policy-makers, and train other health workers. Since the program is accredited by the University of Health Sciences, Lahore, fellows may receive a Master of Science in Field Epidemiology (the first of its kind in Pakistan) by fulfilling a few additional requirements of the university. In addition, the program has a strong partnership with the University of Washington, allowing residents the option to take certificate courses in public health. Currently, the residents for the fifth cohort are being enrolled in the FELTP and 18 residents of the fourth cohort are in their second year of training. To date, 33 residents have graduated from the Pakistan FELTP—31 from Pakistan and 2 from Afghanistan. In 2010, FELTP started working with the Pakistan Agricultural Research Council to integrate a zoonotic disease component into the program.

Strengthening Public Health Systems

In light of the revised International Health Regulations (2005) and the importance of surveillance in improving health outcomes, the CDC, World Health Organization (WHO), and (former) Pakistan MOH developed a legal framework for disease surveillance in Pakistan.

Viral hepatitis is a priority under the Pakistani Prime Minister's National Plan for Prevention and Control of Hepatitis. In support of this plan, FELTP developed case and risk factor based surveillance for acute hepatitis that is operational at five sentinel sites in Pakistan. These sites are also being utilized to measure disease burden of influenza in an effort to improve influenza surveillance. Plans are underway to implement a population-based early warning system for the pandemic and/or avian influenza. These surveillance sites can be expanded into a broader network of disease surveillance systems throughout Pakistan.

Strengthening Public Health Infrastructure and Institutions

Plans are underway for the National Reference Laboratory to be networked with four provincial laboratories as a pilot project to support laboratory quality and standards. The FELTP has arranged numerous trainings have been arranged for laboratory staff on quality assurance and bio-safety issues.



Dr. Rana Jawad Asghar (left), CDC advisor to the Pakistan FELTP, visits a child who survived the flood waters for 12 hours before rescue, Sindh Province, 2010.



Dr. Jamil Ansari, Pakistan FELTP resident, conducting a field survey on long term fever in Lahore, Pakistan, 2007.



Drs. Padeep Kumar and Tabassam Mahmood, Pakistan FELTP residents, conducting a field survey on long term fever in Lahore, Pakistan, 2007.

After observing high-quality methodological approaches of FELTP fellows, Pakistan's National Expanded Program for Immunization (EPI) and the WHO requested FELTP to assist with their polio eradication work in Pakistan. The National Stop Transmission of Polio (N-STOP) Project was launched in March 2011 as a collaborative initiative of the Pakistan FELTP, EPI, WHO, CDC, and Pakistani provincial departments of health. For the first deployment of N-STOP officers, stakeholders and partners identified 16 high-risk districts in Pakistan with persistent disease transmission. Selected N-STOP officers included both FELTP alumni and participants of an extensive training course implemented by the FELTP. As a result of N-STOP, 16 additional high-risk areas for polio in Pakistan have been identified and covered. Additionally, 5,360 missed children and 2,781 religious/tribal refusals were found and vaccinated. The project has also been instrumental in establishing more than 84 District (DPEC) and Union Council Polio Eradication Committees (UPEC) as per the National Emergency Action Plan (NEAP) guidelines. The effort has resulted in an overall >95% polio vaccination coverage enhancement in 196 union councils (elected local governments to represent village areas).

Future Plans

The Pakistan FELTP plans to:

- Continue engaging stakeholders at all levels within the public health system to build capacity, and improve public health outcomes, with particular emphasis on polio eradication.
- Maintain a strong relationship with the provincial health departments, which currently have the authority for public health activity in Pakistan.
- Strengthen the national network of laboratories as these laboratories are essential for the sentinel site surveillance of hepatitis and influenza and will serve as a basis for expansion.
- In light of the recent devolution of public health authority from the National level to the provinces, re-engage provincial leadership to review, modify, and enact the legislative framework for surveillance into governance in individual provinces.

Key Partners

- CDC Global Immunization Division
- CDC Division of Viral Hepatitis
- U.S. Agency for International Development (USAID-Pakistan)
- U.S. Department of State (DoS)
- U.S. Department of Health and Human Services (HHS)
- Pakistan's National Expanded Program for Immunization (EPI)
- Provincial Departments of Health of Pakistan
- Pakistan National Institute of Health
- World Health Organization (WHO)

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